

## IN THE SPECIFICATION

Please replace the formula shown on page 5 of the specification as follows:

~~$$\frac{\Delta t x g \left\{ q \sqrt{p^2 v^2 (4p^2 - v^2 \Delta t x g^2) (4p^2 + 4q^2 - v^2 (\Delta t x g - \Delta t y g)^2)} \Delta t y g^2 (4q^2 - v^2 \Delta t y g^2) \right\}}{4p \Delta t y g (q^2 v^2 \Delta t x g^2 + p^2 (-4q^2 + v^2 \Delta t y g^2))} +$$

$$\frac{q v^2 \Delta t x g (-4p^2 + v^2 \Delta t x g (\Delta t x g - \Delta t y g)) \Delta t y g \sqrt{p^2 v^2 (4p^2 - v^2 \Delta t x g^2) (4p^2 + 4q^2 - v^2 (\Delta t x g - \Delta t y g)^2)} \Delta t y g^2 (4q^2 - v^2 \Delta t y g^2)}{4 (q^2 v^2 \Delta t x g^2 + p^2 (-4q^2 + v^2 \Delta t y g^2))}$$~~

$$X_r = (-1)^{g_x} \frac{\Delta t x g \left\{ q \sqrt{p^2 v^2 (4p^2 - v^2 \Delta t x g^2) (4p^2 + 4q^2 - v^2 (\Delta t x g - \Delta t y g)^2)} \Delta t y g^2 (4q^2 - v^2 \Delta t y g^2) \right\}}{4p \Delta t y g (q^2 v^2 \Delta t x g^2 + p^2 (-4q^2 + v^2 \Delta t y g^2))} +$$

$$(-1)^{g_x} \frac{\Delta t x g p^2 v^2 \Delta t y g^2 (-4q^2 + v^2 \Delta t y g (\Delta t x g - \Delta t y g))}{4p \Delta t y g (q^2 v^2 \Delta t x g^2 + p^2 (-4q^2 + v^2 \Delta t y g^2))}$$

$$Y_r = (-1)^{g_y} \frac{q v^2 \Delta t x g (-4p^2 + v^2 \Delta t x g (\Delta t x g - \Delta t y g)) \Delta t y g}{4 (q^2 v^2 \Delta t x g^2 + p^2 (-4q^2 + v^2 \Delta t y g^2))} +$$

$$(-1)^{g_y} \frac{\sqrt{p^2 v^2 (4p^2 - v^2 \Delta t x g^2) (4p^2 + 4q^2 - v^2 (\Delta t x g - \Delta t y g)^2)} \Delta t y g^2 (4q^2 - v^2 \Delta t y g^2)}{4 (q^2 v^2 \Delta t x g^2 + p^2 (-4q^2 + v^2 \Delta t y g^2))}$$

Please replace the formula shown on page 20 of the specification as follows:

~~$$x_r = (-1)^{g_x} \frac{\Delta t x g \left\{ q \sqrt{p^2 v^2 (4p^2 - v^2 \Delta t x g^2) (4p^2 + 4q^2 - v^2 (\Delta t x g - \Delta t y g)^2) \Delta t y g^2 (4q^2 - v^2 \Delta t y g^2)} \right\}}{4p \Delta t y g (q^2 v^2 \Delta t x g^2 + p^2 (-4q^2 + v^2 \Delta t y g^2))}$$

$$y_r = (-1)^{g_y} \frac{q v^2 \Delta t x g (-4p^2 + v^2 \Delta t x g (\Delta t x g - \Delta t y g)) \Delta t y g}{4(q^2 v^2 \Delta t x g^2 + p^2 (-4q^2 + v^2 \Delta t y g^2))} +$$

$$(-1)^{g_y} \frac{\sqrt{p^2 v^2 (4p^2 - v^2 \Delta t x g^2) (4p^2 + 4q^2 - v^2 (\Delta t x g - \Delta t y g)^2) \Delta t y g^2 (4q^2 - v^2 \Delta t y g^2)}}{4(q^2 v^2 \Delta t x g^2 + p^2 (-4q^2 + v^2 \Delta t y g^2))}$$~~

$$X_r = (-1)^{g_x} \frac{\Delta t x g \left\{ q \sqrt{p^2 v^2 (4p^2 - v^2 \Delta t x g^2) (4p^2 + 4q^2 - v^2 (\Delta t x g - \Delta t y g)^2) \Delta t y g^2 (4q^2 - v^2 \Delta t y g^2)} \right\}}{4p \Delta t y g (q^2 v^2 \Delta t x g^2 + p^2 (-4q^2 + v^2 \Delta t y g^2))} +$$

$$(-1)^{g_x} \frac{\Delta t x g p^2 v^2 \Delta t y g^2 (-4q^2 + v^2 \Delta t y g (-\Delta t x g + \Delta t y g))}{4p \Delta t y g (q^2 v^2 \Delta t x g^2 + p^2 (-4q^2 + v^2 \Delta t y g^2))}$$

$$Y_r = (-1)^{g_y} \frac{q v^2 \Delta t x g (-4p^2 + v^2 \Delta t x g (\Delta t x g - \Delta t y g)) \Delta t y g}{4(q^2 v^2 \Delta t x g^2 + p^2 (-4q^2 + v^2 \Delta t y g^2))} +$$

$$(-1)^{g_y} \frac{\sqrt{p^2 v^2 (4p^2 - v^2 \Delta t x g^2) (4p^2 + 4q^2 - v^2 (\Delta t x g - \Delta t y g)^2) \Delta t y g^2 (4q^2 - v^2 \Delta t y g^2)}}{4(q^2 v^2 \Delta t x g^2 + p^2 (-4q^2 + v^2 \Delta t y g^2))}$$